

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
UP Del Rio Train Derailment - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VI

Subject: POLREP #2
Final POLREP
UP Del Rio Train Derailment
A6DP
Brackettville, TX
Latitude: 29.3647475 Longitude: -100.6412888

To: Ragan Broyles, Superfund Division
Lawrence Stanton, EPA HQ
Kelly Crunk, TCEQ

From: Roberto Bernier, FOSC

Date: 3/1/2012

Reporting Period: 28 February 2012

1. Introduction

1.1 Background

Site Number:	Contract Number:
D.O. Number:	Action Memo Date:
Response Authority: CERCLA	Response Type: Emergency
Response Lead: PRP	Incident Category:
NPL Status:	Operable Unit:
Mobilization Date: 2/7/2012	Start Date: 2/7/2012
Demob Date: 2/28/2012	Completion Date:
CERCLIS ID:	RCRIS ID:
ERNS No.: NRC 1002329	State Notification: 20120400
FPN#:	Reimbursable Account #: A6DP

1.1.1 Incident Category

Emergency Response - RP Lead

1.1.2 Site Description:

The site is a Union Pacific Railroad (UPRR and RP) train derailment that occurred at approximately 1005 hours on 7 February 2012 approximately 15 miles east of Del Rio, TX. Thirty-one cars derailed, 19 of which were loaded with materials. Five of the derailed cars are a concern due to potential hazardous

materials cargo. Two additional rail cars are also a concern due to oil in addition to its flammable properties.

1.1.2.1 Location

Kinney County, mile post 361, next to Highway 90, approximately 15 miles east of Del Rio, TX.

1.1.2.2 Description of Threat

Three of the derailed cars contained residual amounts of chlorine (toxic/oxidizer), one car contained potassium hydroxide (caustic), and one rail car contained propylene oxide (flammable/oxidizer). The two remaining tank cars of concern contained lubricant oil and nut oil (flammable). No releases from these cars have been reported.

On 28 February, 2012, EPA START returned to the site to observe and air monitor the transfer of hazardous materials and oil from the damaged tank cars to undamaged tank cars or vessels for final removal from the site.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

RP lead ER (no removal needed). The following was to determine release or threat of a release:

- Initial entry by Laughlin AFB* Hazmat team at the request of the local authorities - No detection
- RP air monitoring contractor (CTEH) - No detection
- EPA START team - No detection

* Laughlin AFB is located only 5 miles west of incident and was able to support by quickly deploying a Hazmat Team to assess

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Initial reports from the local authorities indicated a potential release of a chemical due to the derailment. It was supported by the train manifest when quickly submitted by Union Pacific Railroad (UPRR). The manifest included several tank cars carrying chemicals or hazardous material and oil. Due to the line running parallel to HWY 90, the local authorities had to shut down the highway, which is the main connection between Del Rio and San Antonio. Laughlin Air Force Base is located 5 miles to the west of the incident and was able to support the response by deploying a Level A Hazmat team to conduct an initial entry to detect releases of hazardous materials. The team detected no chemical of concern above background levels and UPRR was able to initiate work to stabilize the wreckage and repair the line after coordinating with the local authorities and TCEQ on site. In the meantime EPA OSC Bernier continued coordinating with the locals, TCEQ, and UPRR while en-route with the understanding that no releases or leak were detected, but that the potential still existed.

UPRR started by securing those tank cars carrying hazardous materials and oil. Some had to be up-righted, moved away from the wreck if in the way, and stabilize with sand on the both sides to prevent any structural damage. In the meantime, additional crews concentrated in clearing the rest of the wreckage and debris to allow access to the railroad repair crew. UPRR technical contractor (CTEH) arrived on scene and started with area and spot air monitoring. EPA arrived later with additional meters and coordinated with CTEH. No chemicals of concern were detected above background. Activities involving dealing with those cars with hazardous materials or oil were completed at around 0200 hrs Wednesday morning. Once the damaged tank cars were secured, TCEQ indicated no concerns with the ER phase.

Additional rounds of air monitoring resumed at 0800 hrs and again no chemicals of concern were detected above background. Wreck and debris removal activities were almost complete and demobbing with the line repair crew the only ones left on-scene. The railroad was expected to reopen by mid afternoon.

2.1.2 Response Actions to Date

EPA OSC Bernier and 5 START contractors mobilized to the site on 7 February 2012 at approximately 1330 hours. EPA also mobilized the Region 6 mobile command post. EPA OSC Bernier and two START contractors arrived onsite at approximately 2230 hours. Two START contractors who mobilized from Houston were already on site. Upon arrival, OSC Bernier and START observed PRP contractors onsite performing response activities. The three derailed cars containing residual chlorine and the car carrying potassium hydroxide had been up-righted and moved to secure locations. The rail cars containing lubricant and nut oils were also upright and secure. The tank car carrying propylene oxide remained in its derailed position. EPA and START monitored PRP contractors upright the propylene oxide tank car. START conducted air monitoring during the process for VOCs, LEL, OH, H₂S, and CO. There were not any air monitor readings above background levels. No releases of hazardous materials have been observed by EPA or START. CTEH was performing air monitoring for chlorine, VOCs, LEL, and O₂ and it indicated no detections of hazardous concentrations of toxic vapors.

On 8 February 2012, EPA and START returned to the site and all of the damaged rail cars had been removed from the railroad tracks and personnel were continuing to repair the damaged rail line. START conducted air monitoring around the perimeter of the incident, focusing on the areas where the rail cars of concern were located. START monitored for Cl₂, VOCs, LEL, O₂, H₂S, and CO. There were not any detections above background levels.

UPRR personnel and contractors conducted pressure tests on the rail cars of concern and reported that the conditions of the rail cars remained stable. CTEH representatives reported no detections of hazardous concentrations of toxic vapors and that they were preparing to demobilize from the site.

EPA and START demobilized from the site on 8 February 2012. UPRR indicated that the damaged but secured oil and haz tank cars will remain at the derailment site until they could coordinate a safe and efficient transfer of the materials for transport.

START remobilizes to the site on 28 February 2012 with air monitoring equipment. CTEH set up air monitoring for UP by placing 4 stationary monitors around the transfer point. In addition, one CTEH monitor was used as a mobile station to monitor in the vicinity of the tanks. Four transfer tanks arrived on site at 0930 hours and the transfer of the potassium hydroxide and the two oil tanks using pumps began around 1015 hours and were completed by 1230 hours, without incident. The propylene oxide was transferred using a nitrogen to pressurize the damaged tank and force the propylene oxide into the transfer tank. The propylene vapors displaced from the transfer tank was burned in a flare with a propane pilot light. The transfer of the propylene oxide began at 1054 hours and was completed by 1355 hours. START conducted air monitoring during the process for VOCs, LEL, O₂, H₂S, and CO using a MultiRAE and TVA-1000. There were no detections above background. After the transfer was completed UP connected the flare to the damaged tank to flare the mixture of nitrogen and propylene vapors remaining in the tank. START demobilized from the site on 28 February 2012. Transfer and disposition of the oil in the oil tanks was accomplished without incident.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

UPRR owns the derailed train.

2.2 Planning Section

2.2.1 Anticipated Activities

UPRR will continue to purge the propylene tank, they will then steam the interior prior to cutting up the tank for recycling. The empty chlorine tanks will be loaded and strapped onto rail flat beds and removed from the location. Other damaged rail cars will be cut up for removal from site.

2.2.1.1 Planned Response Activities

UPRR will continue removal of the damaged railcars. No further action is anticipated by the EPA.

2.2.1.2 Next Steps

For the purpose of a final report, air monitoring data sharing between UPRR (CTEH data) and EPA is being coordinated.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

3.2 Cooperating Agencies

- TCEQ
- Laughlin AFB Hazmat
- Kinney Co. Emergency Management
- Kinney Co, Sheriff Department

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.